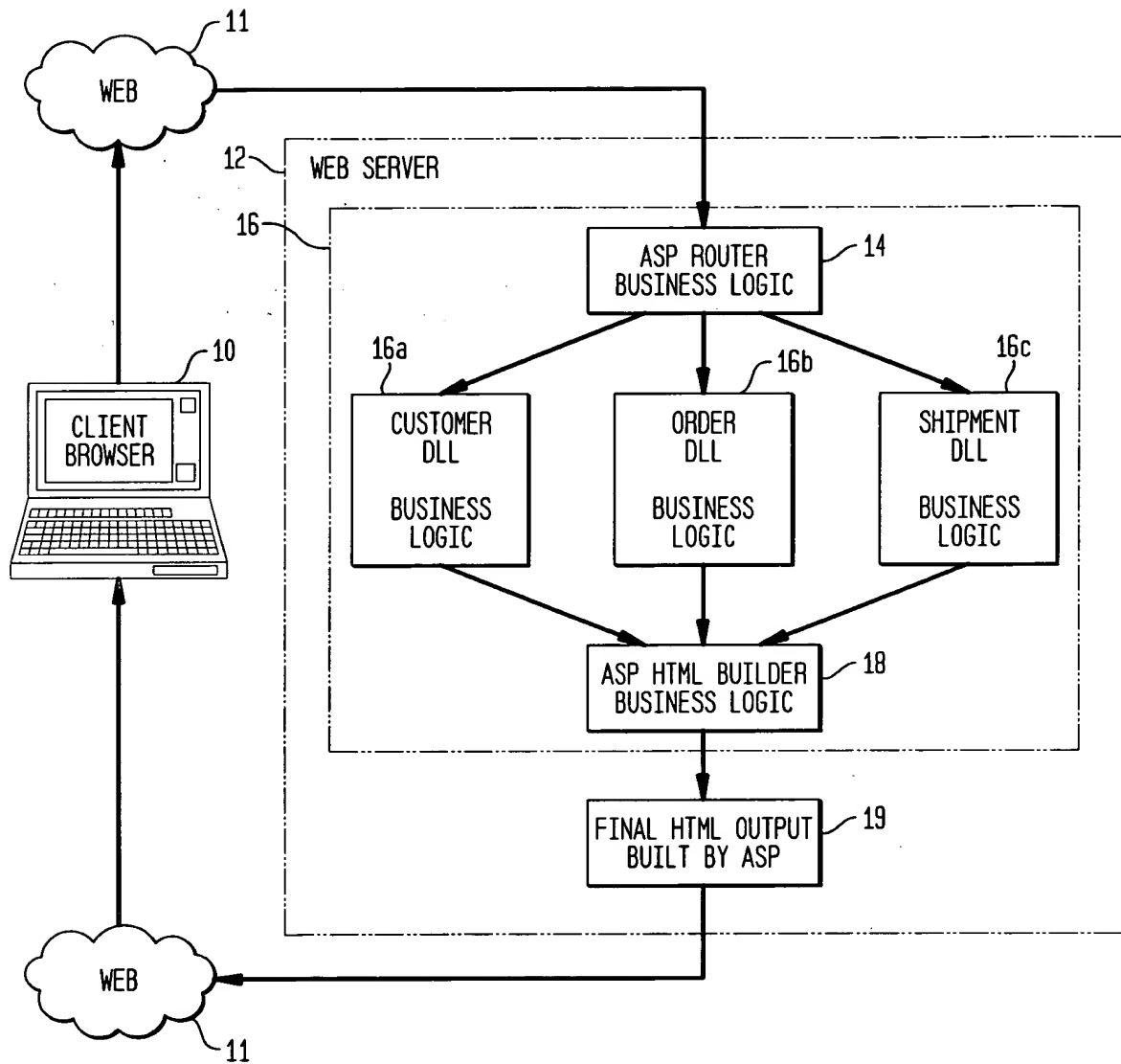




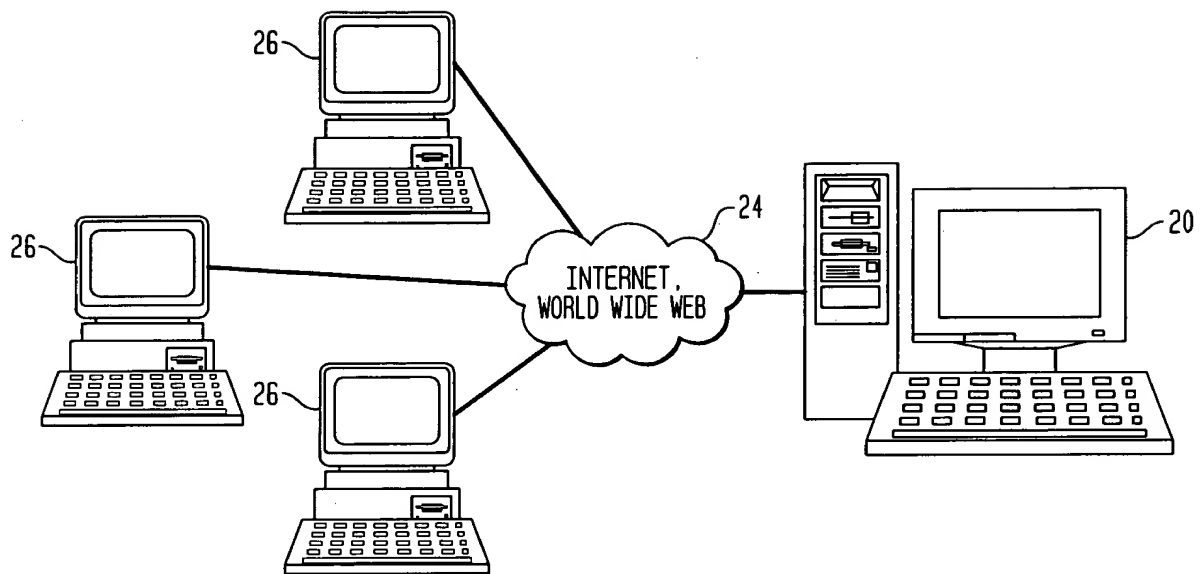
1/26

**FIG. 1**  
(PRIOR ART)



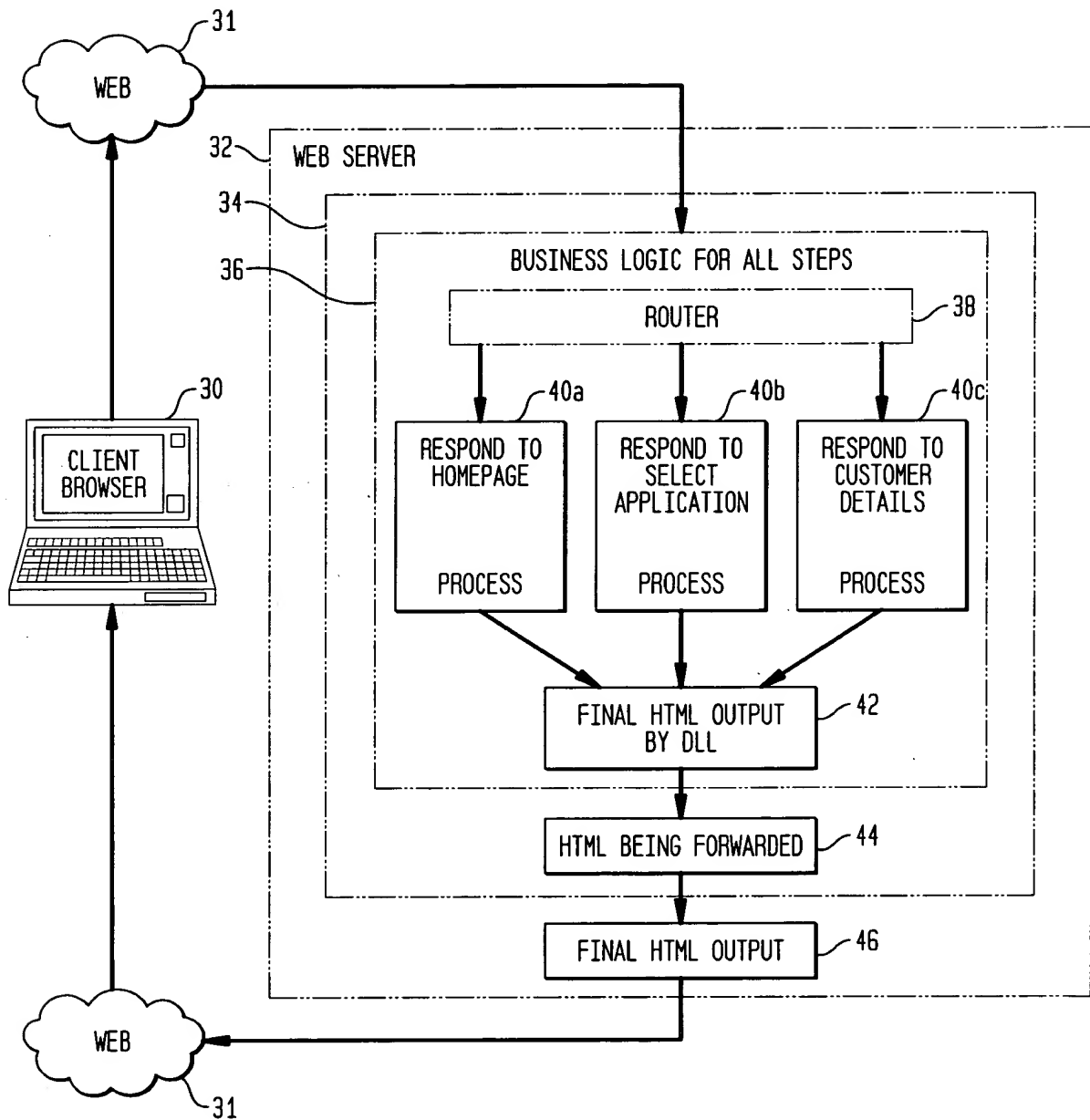
2/26

FIG. 2



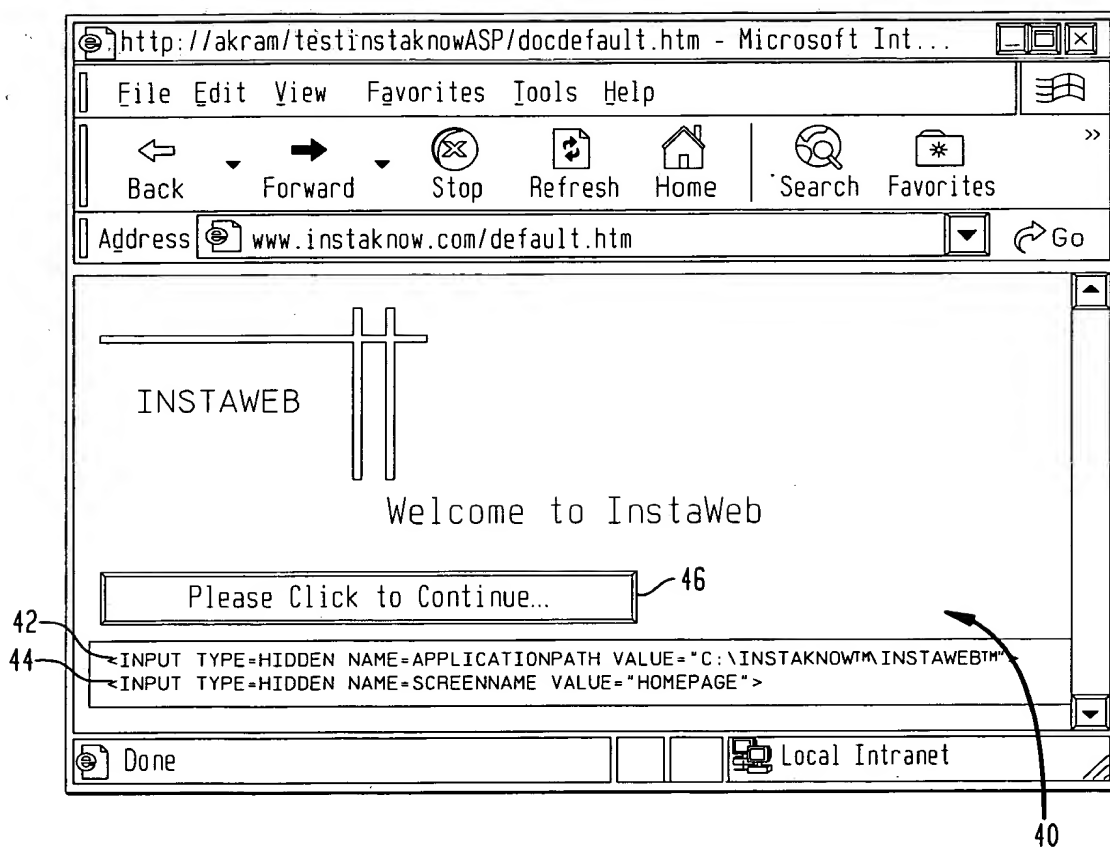
3/26

FIG. 3



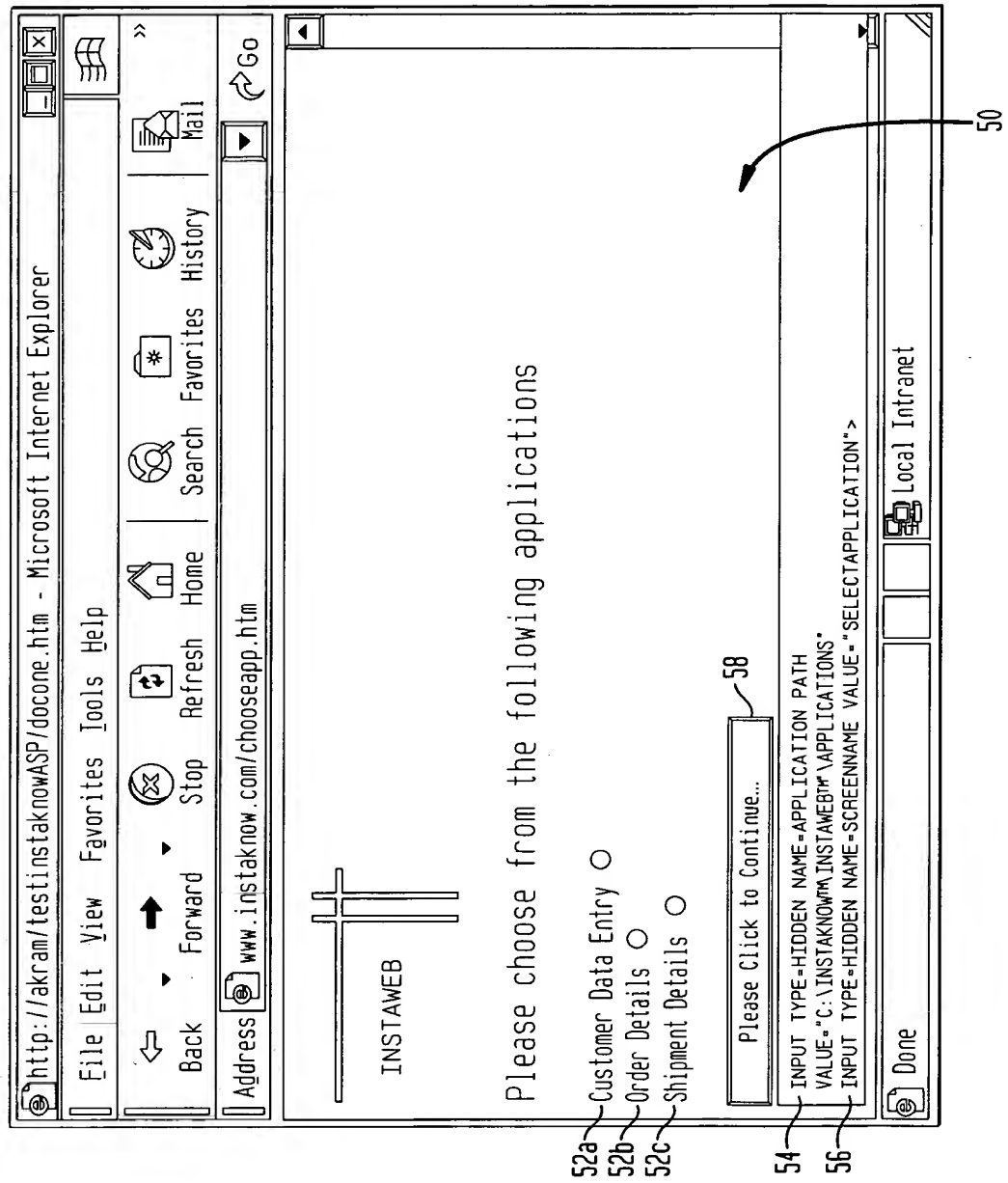
4/26

FIG. 4



5/26

FIG. 5



6/26

FIG. 6

http://akram/testinstaknowASP/doctwo.htm - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail

Address [www.instaknow.com/customerdetails.htm](http://www.instaknow.com/customerdetails.htm) Go

INSTAWEB

Please enter the following information

62a Name

62b Date of Birth

62c City

62d E-mail Address

63

64 INPUT TYPE=HIDDEN NAME=APPLICATIONPATH

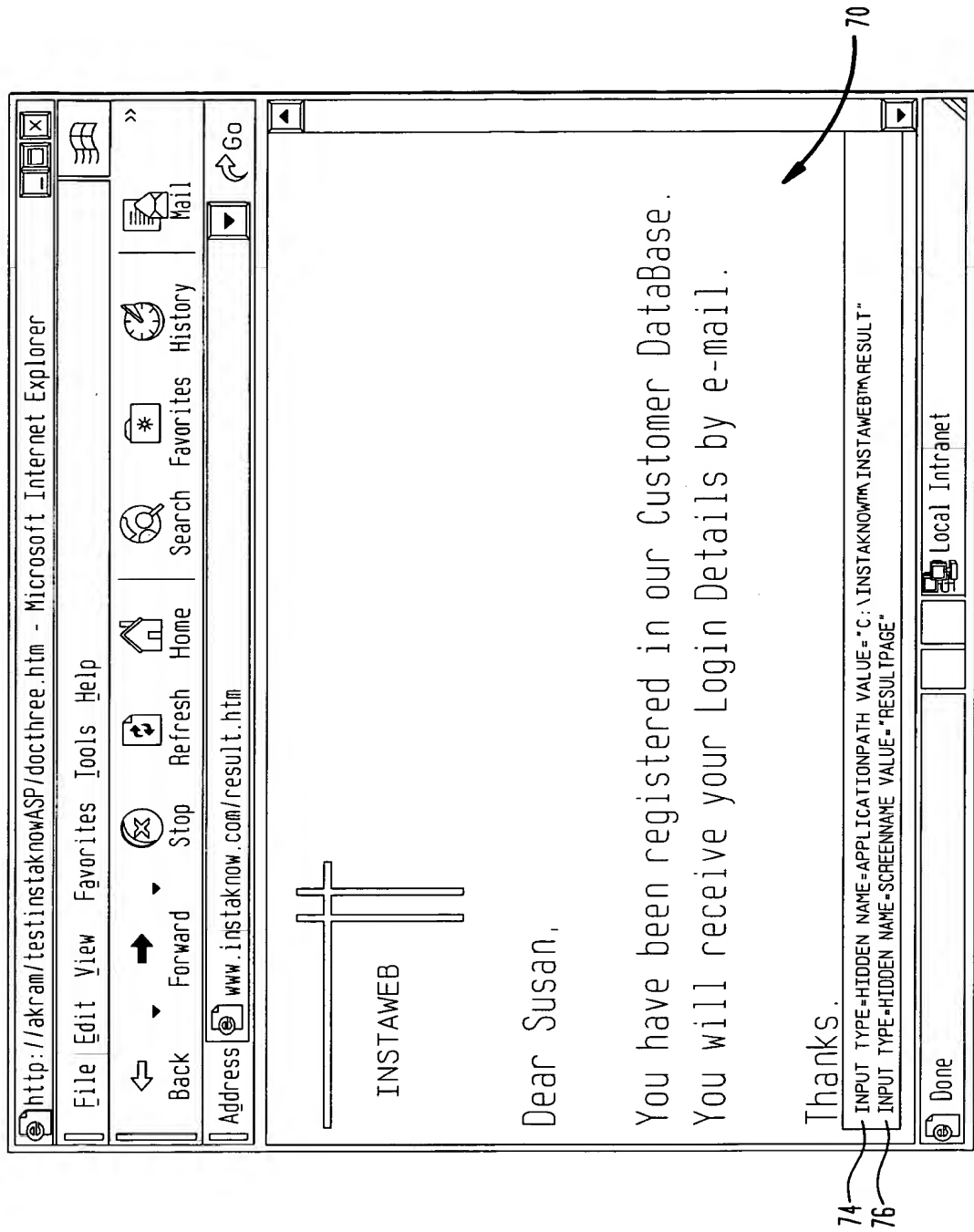
65 VALUE="C:\INSTAWEB\INSTAKNOW\M\CUSTOMER">

Done Local Intranet

60

7/26

FIG. 7



8/26

FIG. 8

82

The screenshot shows the 'InstaKnow - Total Solution' application window. The title bar includes 'File Edit Run Tools Window Help'. Below the menu bar is a toolbar with various icons. The main area displays a process tree for 'Get Stock Details From MSN Investor'. The tree includes steps like 'ACCEPT Accept Display Flag', 'EXTRACT NON WEB DATA:: Read Input Stock List', 'EXTRACT HTML DATA:: Initial Navigate to MSN Inves', 'POSITION P001\_ReadStockListMoveFirst', 'Set P001\_msnStkInp.Symbol = "IBH"', 'While P001\_ReadStockList.EOF Not Equal True', 'Set P001\_msnStkInp.Symbol = P001\_ReadStockList StockSymbol', 'EXTRACT HTML DATA:: Get details for one stock from MSN Investor', 'Set P001\_DataToBeSaved\_CURRENTROW = P001\_ReadStockList\_CURRENTROW', 'POSITION P001\_msnStk.MoveLast', 'ASSIGN MoveStockDetailsToOutput', 'POSITION P001\_ReadStockList.MoveNext', 'SAVE P001\_DataToBeSaved As WriteToExcel.', 'IF P001\_DisplayFlag Equals True', and 'DISPLAY : Display the output'. Annotations include 'Menu Bar', 'Verbs', 'Modes', 'List of processes in Application', 'Load Excel workbook containing stock list', 'Read first row of stock list', 'An Individual Step of a process', 'Display will be shown to the user list', 'Data Groups, Data Elements, and their attributes', and 'Process Tree 80'. A table at the bottom lists data elements with columns: Name, Value, Default Value, Instance, Type, and Precision.

Name	Value	Default Value	Instance	Type	Precision
P001_ReadStockList.StockSymbol			M	VARCHAR	2
P001_ReadStockList_CURRENTROW		1	S	NUMBER	2
P001_ReadStockList_RECORDCOUNT		0	S	NUMBER	2
P001_ReadStockList_EOF		True	S	BOOLEAN	2
P001_ReadStockList_BOF		True	S	BOOLEAN	2

StockDetailsFromMSNInvestor Total

FIG. 9

90

The screenshot shows the 'InstaKnow - Application Wizard' dialog box. It has a title bar with 'InstaKnow - Application Wizard'. The main area contains the following text: 'Application Name: Get Stock Details From MSN Investor', 'At what stage is the Application right now?', and a list of stages: 'Trial', 'Trial', 'Improvements', 'Confirmed', and 'Ready'. A dropdown arrow is next to the first 'Trial' entry. At the bottom, there are three buttons: a checkmark button, an empty button, and a button with a question mark.

92

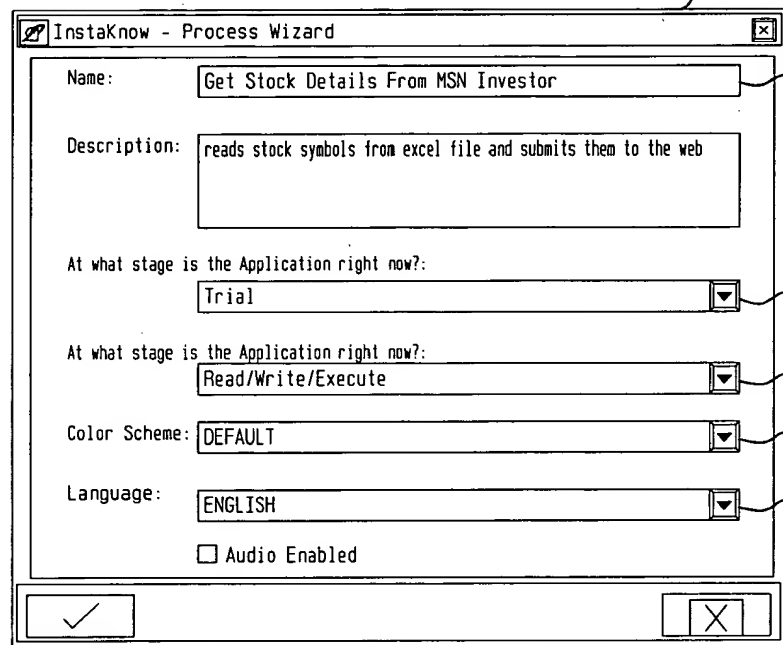
94



9/26

FIG. 10

100



InstaKnow - Process Wizard

Name:  102

Description:

At what stage is the Application right now?:  104

At what stage is the Application right now?:  106

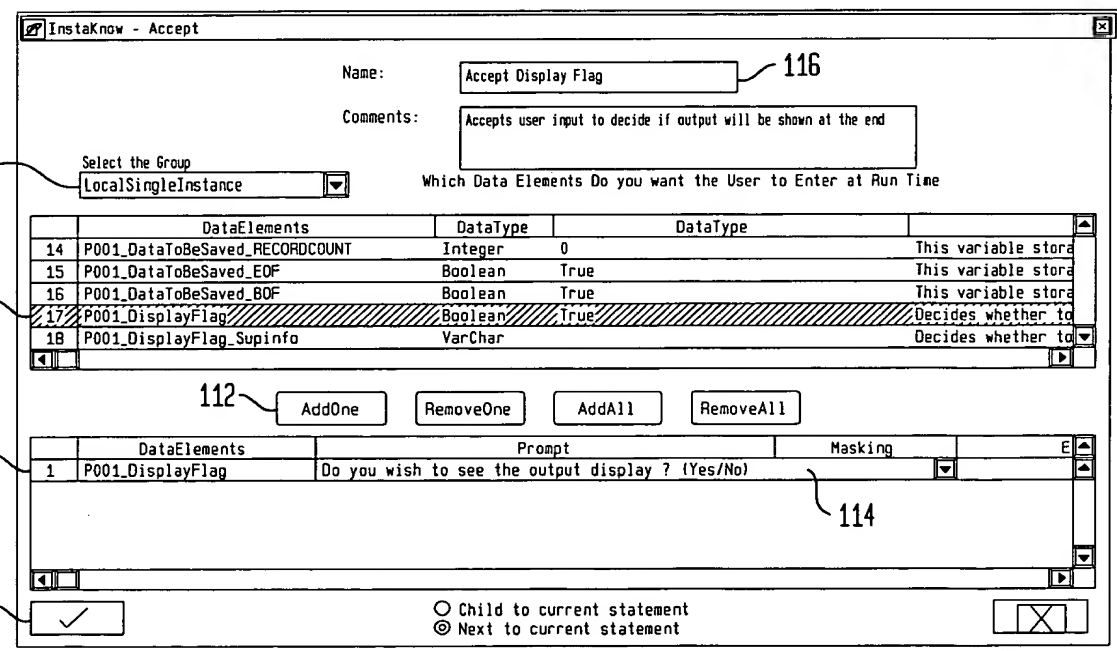
Color Scheme:  108

Language:  109

☐ Audio Enabled

☐ ☐

FIG. 11



InstaKnow - Accept

Name:  116

Comments:

111 Select the Group

Which Data Elements Do you want the User to Enter at Run Time

	DataElements	DataType	DataType	
14	P001_DataToBeSaved_RECORDCOUNT	Integer	0	This variable store
15	P001_DataToBeSaved_EOF	Boolean	True	This variable store
16	P001_DataToBeSaved_BOF	Boolean	True	This variable store
17	P001_DisplayFlag	Boolean	True	Decides whether to
18	P001_DisplayFlag_Supinfo	VarChar		Decides whether to

110

112

	DataElements	Prompt	Masking	E
1	P001_DisplayFlag	Do you wish to see the output display ? (Yes/No)	<input type="text" value=""/>	

113

114

115 ☐ ☐

☐ Child to current statement  
☒ Next to current statement

10/26

FIG. 12

InstaKnow - Data Extraction Wizard

Name:  
Read Input Stock List

Comments:  
Read Excel workbook containing stock list

☐ HTML

☐ XML

☒ Other Data sources

Group Name

ReadStockList

Column Name

StockSymbol

Group Name

Column Name

☒

☐ Child to current statement

☒ Next to current statement

120

121

122

123

124

125

FIG. 13

InstaKnow - GET RELATIONAL DATA

130

131 Data Source Group Name ReadStockList

132 Enter the details of your data source.

Type MS Excel

133 Path / URL : C:\TotalSolution\App1\InputStockList.xls

Rows to Extract 999 Zero by default gets all rows

☐ Disconnect after Getting Data

Cursor Type  
☐ Static ☐ Dynamic ☐ Key ☒ Forward only

Finish!!! Previous Next Preview Cancel

FIG. 14

InstaKnow - GET RELATIONAL DATA

Source Tables

Select the tables to use from your data source.

Sheet1\$Database

Finish!!!

Previous

Next

Preview

Cancel

FIG. 15

InstaKnow - GET RELATIONAL DATA

Column definition

Define columns you want to use in the Business Logic

151

StockSymbol

+

-

AB

Group By:

+

-

Select the Key Columns in the next step first and then come back here to Define Group By columns

Finish!!!

Previous

Next

Preview

Cancel

FIG. 16

InstaKnow - GET RELATIONAL DATA

Key columns

Key columns identify unique rows.

StockSymbol

161

162

ASC

StockSymbol

ASC

◀ ▶

☐ Sort before compare

To Define a Group By column go to the previous step

© Finish!!! ◀ Previous ▶ Next ✕ Preview ✕ Cancel

15/26

FIG. 17

InstaKnow - GET RELATIONAL DATA

Filtering

Define filter conditions, if any to narrow down the data

16/26

FIG. 18

InstaKnow - Data Extraction Wizard

181 Name: Initial Navigate to MSN Investor

182 ☒ HTML ☐ XML ☐ Other Data sources

183 Select the schema C:\TotalSolution\App1\Demo\msnStockInitial.xml

Time Out (sec) 20

☒ Load schema from files ☐ Load schema that is supplied

☐ Start trees current page

☒ Show Browser at run time 184

185 Select the Group P001\_msnStkInp

Starting URL: Symbol

186 Select the Variable

Show Interface Details

Group Name	Column Name
msnStkInp	Symbol_VarChar

☒ ☐ Child to current statement

☒ Next to current statement

FIG. 19

InstaKnow - Position Wizard

191 Select a group P001\_ReadStockList

192 Select a method MoveFirst

193 Comments: Read first row stock list

☒ ☐ Child to current statement

☒ Next to current statement



17/26

FIG. 20

200

InstaKnow - Assignment Wizard

Which data element will receive the assignment (Target):

☐ Global Data Elements

P001\_msnStkInp.Symbol

Define

201

What kind of assignment do you wish to do?

☒ Value ☐ An Expression ☐ Another Data Element

The Data Element - Symbol, belonging to a group called P001\_msnStkInp is assigned a hard coded VALUE - IBM

Source Value

IBM

202

Comments:

If the Group, and the Data element is not present in the list, they can be created using the 'Define' button. This brings up the Data Define wizard.

☒ Child to current statement ☐ Next to current statement

FIG. 21

210

InstaKnow - Loops Wizard

What type of loop?

☒ While (Condition) Do... ☐ Repeat... Until (Condition)

Loop Condition:

[ .P001\_ReadStkList\_EOF]<>True

212

Wizard

214

Comments:

Click this button to bring up the Loop Condition defini wizard

☒ Child to current statement ☐ Next to current statement

18/26

FIG. 22

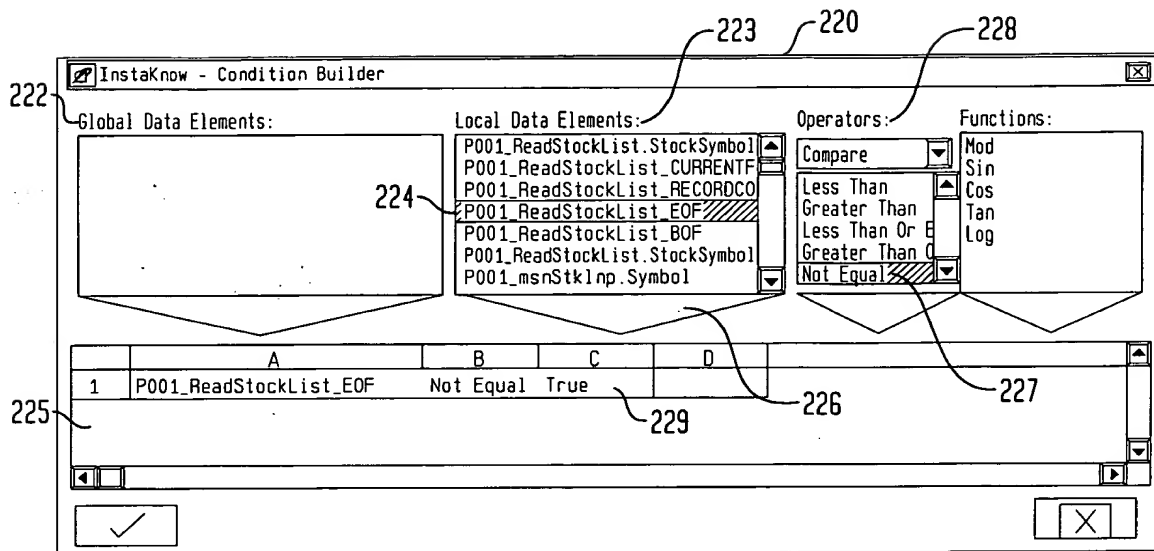
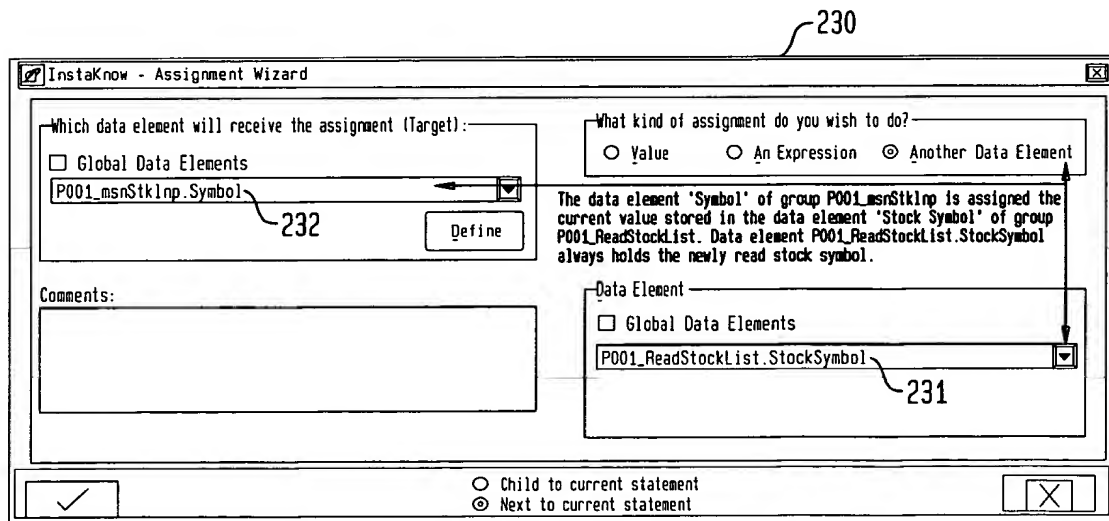


FIG. 23



19/26

FIG. 24

The screenshot shows the 'InstaKnow - Data Extraction Wizard' window. It has a title bar with a standard Windows icon and a close button. The main area is divided into several sections. At the top, there are two text boxes: 'Name:' containing 'Initial Navigate to MSN Investor' and 'Comments:'. Below these is a radio button group with three options: 'HTML' (selected), 'XML', and 'Other Data sources'. The next section is 'Select the schema', which includes a text box with the path 'C:\TotalSolution\App1\Demo\msnStockInitial.xml' and a 'Time Out (sec)' spinner set to '20'. Below this are two radio buttons: 'Load schema from files' (selected) and 'Load schema that is supplied'. To the right of these are two checkboxes: 'Start trees current page' (unchecked) and 'Show Browser at run time' (checked). Below the schema selection is a 'Select the Group' dropdown menu showing 'P001\_msnStkInp' and a 'Starting URL' text box containing 'Symbol'. To the right of the URL is a 'Select the Variable' dropdown menu showing 'Symbol'. Below these fields is a 'Show Interface Details' button. At the bottom, there is a table with two columns: 'Group Name' and 'Column Name'. The table contains one row with 'msnStkInp' in the 'Group Name' column and 'Symbol\_VarChar' in the 'Column Name' column. At the very bottom, there is a radio button group with two options: 'Child to current statement' (unchecked) and 'Next to current statement' (selected). There are also checkmark and close buttons at the bottom right.

InstaKnow - Data Extraction Wizard

Name: Initial Navigate to MSN Investor

Comments:

☒ HTML ☐ XML ☐ Other Data sources

Select the schema C:\TotalSolution\App1\Demo\msnStockInitial.xml Time Out (sec) 20

☒ Load schema from files ☐ Load schema that is supplied

☐ Start trees current page ☒ Show Browser at run time

Select the Group P001\_msnStkInp Starting URL: Symbol Select the Variable

Show Interface Details

Group Name	Column Name
msnStkInp	Symbol_VarChar

☒ Child to current statement ☒ Next to current statement

FIG. 25

The screenshot shows the 'InstaKnow - Assignment Wizard' window. It has a title bar with a standard Windows icon and a close button. The main area is divided into two main sections. The left section is titled 'Which data element will receive the assignment (Target):' and contains a checkbox for 'Global Data Elements' (unchecked) and a list box showing 'P001\_DataToBeSaved\_CURRENTROW' with a 'Define' button next to it. A callout box with the number '254' points to the 'Define' button. Below this is a 'Comments:' section with the text: 'If the Group, and the Data Element is not present in the list, it can be created using the 'Define' button. This brings up the Define Data Wizard.' The right section is titled 'What kind of assignment do you wish to do?' and contains three radio buttons: 'Value' (unchecked), 'An Expression' (unchecked), and 'Another Data Element' (selected). Below this is a text box containing the following text: 'The data variable - CurrentRow in Group P001\_DataToBeSaved is assigned the current value stored in another data variable - Currentrow of the P001\_ReadStockList group, which always holds the current value of the Stock for the corresponding Stock symbol.' Below the text box is a 'Data Element' section with a checkbox for 'Global Data Elements' (unchecked) and a list box showing 'P001\_ReadStockList.CURRENTROW' with a callout box with the number '252' pointing to it. At the bottom, there is a radio button group with two options: 'Child to current statement' (unchecked) and 'Next to current statement' (selected). There are also checkmark and close buttons at the bottom right.

InstaKnow - Assignment Wizard

Which data element will receive the assignment (Target):

☐ Global Data Elements

P001\_DataToBeSaved\_CURRENTROW 254 Define

Comments:

If the Group, and the Data Element is not present in the list, it can be created using the 'Define' button. This brings up the Define Data Wizard.

What kind of assignment do you wish to do?

☐ Value ☐ An Expression ☒ Another Data Element

The data variable - CurrentRow in Group P001\_DataToBeSaved is assigned the current value stored in another data variable - Currentrow of the P001\_ReadStockList group, which always holds the current value of the Stock for the corresponding Stock symbol.

Data Element

☐ Global Data Elements

P001\_ReadStockList.CURRENTROW 252

☐ Child to current statement ☒ Next to current statement

20/26

FIG. 26

The dialog box is titled "InstaKnow - Position Wizard". It contains two dropdown menus: "Select a group" with the value "P001\_msnStk" (labeled 262) and "Select a method" with the value "MoveLast" (labeled 264). Below these is a text area for "Comments:" containing the text "Go to latest extracted row". At the bottom, there are two radio buttons: "Child to current statement" (unselected) and "Next to current statement" (selected). There are also checkmark and close buttons.

FIG. 27

The dialog box is titled "InstaKnow - Assignment Wizard". It contains several fields: "Name of the Assignment:" with the value "SAVE P001\_DataToBeSaved As WriteToExc", "Enter Comments:" with the value "Move Stock details to Output", "Select the Receiving Group" with the value "P001\_DataToBeSaved" (labeled 272), and "Select the Sending Group" with the value "P001\_msnStk" (labeled 271). Below these is a table with three columns: "COLUMN NAME", "TYPE", and "TRANSFORMATION". The table lists various data fields and their corresponding transformations. At the bottom, there is a checkbox "Find closest col name match" (unchecked) and two radio buttons: "Child to current statement" (unselected) and "Next to current statement" (selected). There are also checkmark and close buttons.

COLUMN NAME	TYPE	TRANSFORMATION
P001_DataToBeSaved.CompanyName	VarChar	P001_msnStk.CompanyName
P001_DataToBeSaved.CompanyName_SupInfo	BinaryString	P001_msnStk.CompanyName_SupInfo
P001_DataToBeSaved.Last	VarChar	P001_msnStk.Last
P001_DataToBeSaved.Last_SupInfo	BinaryString	P001_msnStk.Last_SupInfo
P001_DataToBeSaved.Open	VarChar	P001_msnStk.Open
P001_DataToBeSaved.Open_SupInfo	BinaryString	P001_msnStk.Open_SupInfo
P001_DataToBeSaved.Change	VarChar	P001_msnStk.Change
P001_DataToBeSaved.Change_SupInfo	BinaryString	P001_msnStk.Change_SupInfo
P001_DataToBeSaved.PreviousClose	VarChar	P001_msnStk.PreviousClose
P001_DataToBeSaved.PreviousClose_SupInfo	BinaryString	P001_msnStk.PreviousClose_SupInfo

21/26

FIG. 28

InstaKnow - Position Wizard

Select a group  
P001\_ReadStockList

Select a method  
MoveNext

Comments:

☒ Child to current statement  
☐ Next to current statement

FIG. 29

InstaKnow - Save As Wizard

Save As Name  
WriteToExcel

Comments:  
The extracted stock values stored in this group will be written to the excel file against the corresponding stock symbols.

Save the Data Type  
☐ XML  
☒ Excel  
☐ Flat File

Number of Rows to Extract in Output  
999

Select the Group to be saved  
P001\_DataToBeSaved

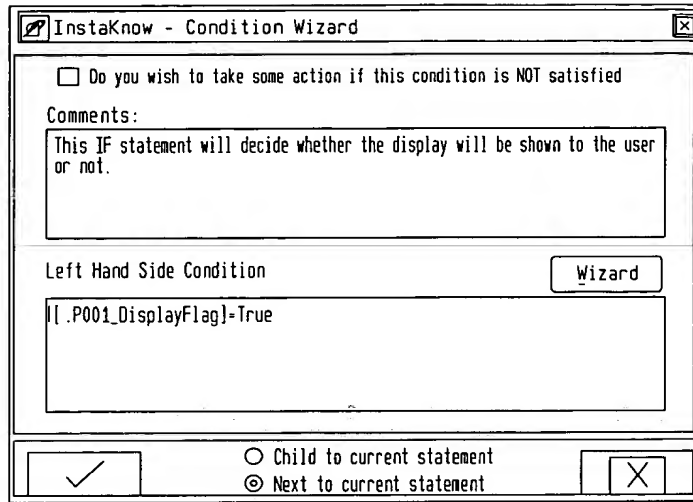
☐ Check to include the Supporting Information column

If there are spaces in the Recordset Field Names replace spaces with  
☐ Hyphens ☒ Underscore

☒ Child to current statement  
☐ Next to current statement

22/26

FIG. 30



InstaKnow - Condition Wizard

☐ Do you wish to take some action if this condition is NOT satisfied

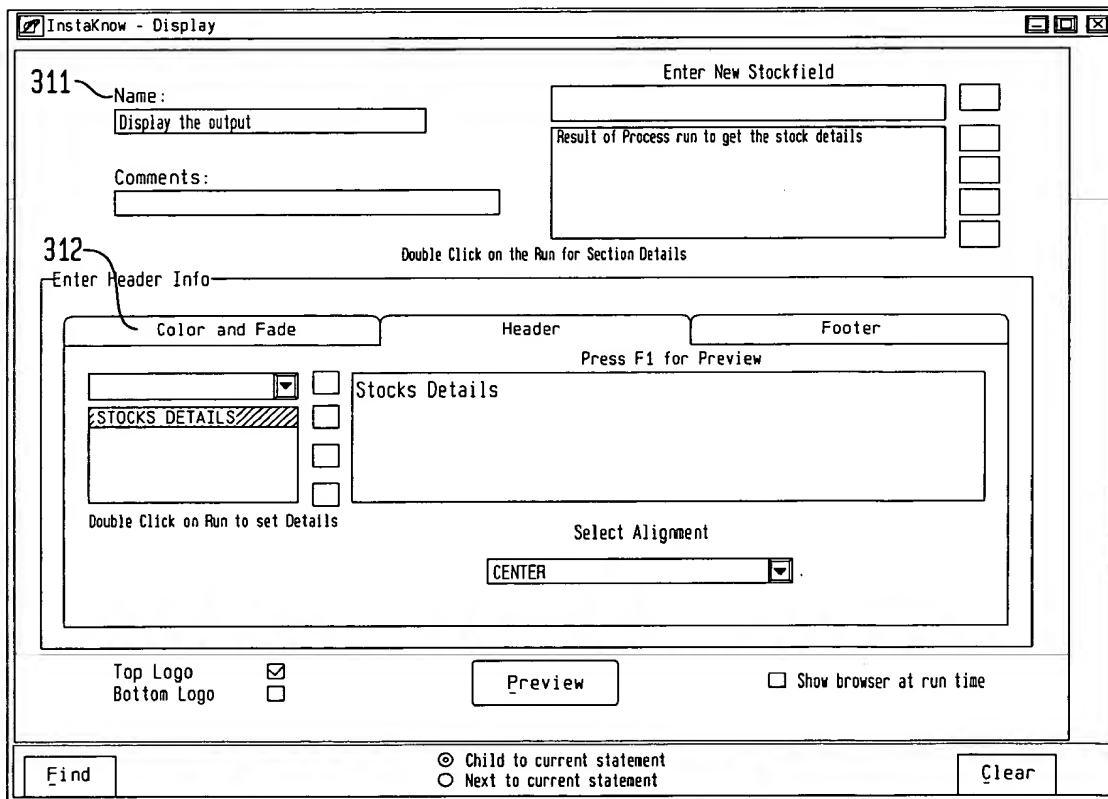
Comments:  
This IF statement will decide whether the display will be shown to the user or not.

Left Hand Side Condition Wizard

[[ .P001\_DisplayFlag]-True

☒ Child to current statement  
☐ Next to current statement

FIG. 31



InstaKnow - Display

311 Name:  Enter New Stockfield

Comments:

312 Enter Header Info Double Click on the Run for Section Details

Color and Fade Header Footer

Press F1 for Preview

Stocks Details

Double Click on Run to set Details

Select Alignment

Top Logo ☒ Bottom Logo ☐ Preview ☐ Show browser at run time

Find  ☒ Child to current statement ☐ Next to current statement Clear

23/26

FIG. 32

Details of Result of Process run to get stock details:

Select Data Group

Select Color and Font

Color and Font  Header  Footer

Press F1 for Preview

Stock Details

Select Alignment

Group Details

GroupElements  DataType

Column Name	Column Head	Header FBF	Column FBF	Break	Asc/Desc	Line Type	Visible Descr	Ar
1 P001_DataId	CompanyName			<input type="checkbox"/>	<input checked="" type="checkbox"/>			
2 P001_DataId Last				<input type="checkbox"/>	<input type="checkbox"/>			
3 P001_DataId Open				<input type="checkbox"/>	<input type="checkbox"/>			
4 P001_DataId Change				<input type="checkbox"/>	<input type="checkbox"/>			

Line Type for Details  Border Width:

Grand Totals ☐ Grid Lines ☐ Alignment


FIG. 33

InstaKnow Output - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit

Address C:\TotalSolution\StockDetails\Get Stock Details From MSN Investor\Display the output.htm Go Links >>



InstaKnow Output

Stock Details

330

CompanyName	Last	Open	Change	PctChange	Volume	PE	EarningsPerShare	DivPerShare
Dell Computer Corporation	41 11/16	40 7/8	+7/8	+2.14%	26.65 M	165.70	0.62	NA
Microsoft Corporation	87 5/16	86 15/16	+5/16	+0.36%	29.42 M	157.30	1.52	NA
International Business Machines Corporation	94 5/8	94 5/8	+9/16	+0.60%	8.537 M	22.30	4.22	0.48
Compaq Computer Corporation	21 3/4	21 11/16	+3/16	+0.87%	13.08 M	133.70	0.64	0.06

Done My Computer



25/26

FIG. 34

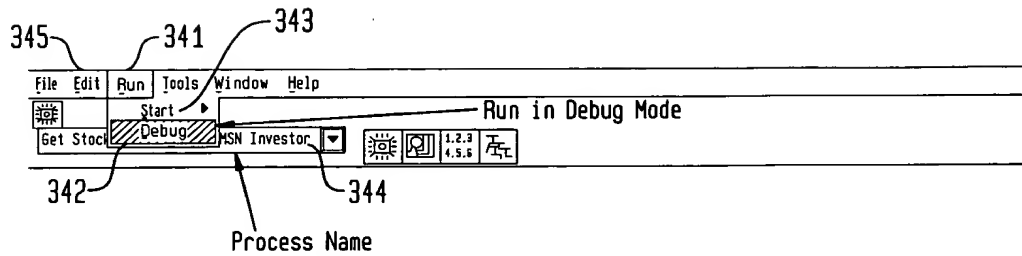
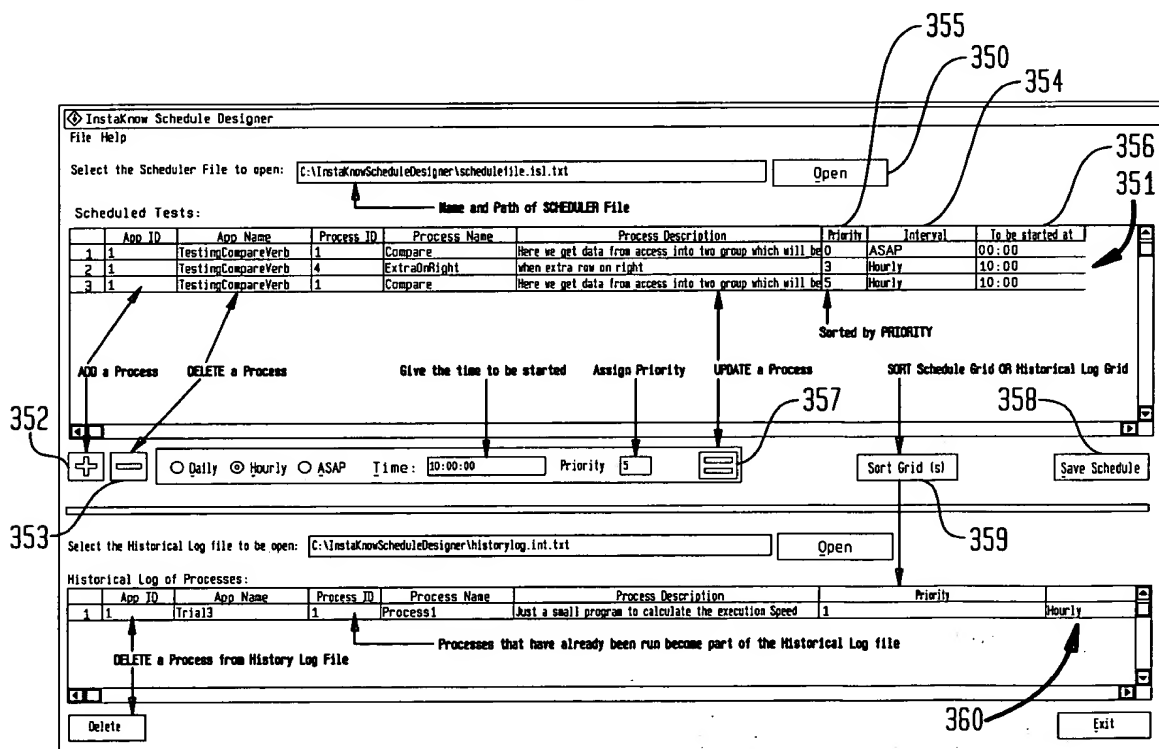


FIG. 35



26/26

FIG. 36

**Frozen-InstaKnow Scheduler**

**Scheduler file created in InstaKnow Schedule Designer**

Scheduler File Name:

History Log File Name:

Select an interval:  minutes  Time to Start: 11/12/1999 11:15 am

Processes to be Submitted:

	App.	App. Name	Process	Process Name	Process Description	Priority	Interval	To be started at
1	1	TestingCompareVerd1	Compare	Here we get data from access2	Hourly	2	Hourly	45:00
2	1	TestingCompareVerd4	ExtraOnRight	when extra row on right	Hourly	3	Hourly	55:00

Processes scheduled to run in order of priority. These processes were picked up from InstaKnow scheduler file. Scheduled time to run. These processes are waiting to be executed.

**Active Process:**

	App.	App. Name	Process	Process Name	Process Description	Priority	Interval	To be started at
1	1	TestingCompareVerd1	Compare	Here we get data from access2	Hourly	1	Hourly	50:00

☐ Show Web Browser

**Frozen**